8. EMISSIONS UNIT GROUP 6: GRANULATION NO. 2 PROCESS

Summary Description

The following is a narrative description of the Granulation No. 2 process regulated in this Tier I operating permit. This description is for informational purposes only.

Ammonia, phosphoric acid, gypsum, and sulfuric acid are mixed in a reactor to form a slurry. This slurry is then mixed with recycled fine product in a granulator where the slurry coats the outside of the recycled product to increase the particle size. The granulated product is then dried and screened. The over-sized material is crushed and recycled with the fine product. The intermediate fraction is the final product. It is cooled and conveyed to storage. In the storage building, product is transferred by front-end loader to a transfer conveyor, which feeds the product transfer system. The product transfer system then loads trucks and/or railcars.

Table 8.1 describes the emissions points related to each emissions unit of the Granulation No. 2 process and the devices used to control emissions.

Table 8.1 EMISSIONS UNITS

Emission Point Identification	Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
450.0	Reactor	Tailgas scrubber	Tailgas scrubber stack
451.0	Granulator		
453.0	Dryer		
461.1	Recycle drag conveyor	Granulation No.2 baghouse	Granulation No.2 baghouse(and cooler baghouse stack)
464.1	Screens		
464.2	Polishing screen		
465.1	Elevator to granulator		
466.1	Elevator to screens		
467.1	Product elevator		
470.3	Cooler	Cooler baghouse	
471.0	Product dump from overhead	Reasonable control of fugitive emissions (enclosure)	Fugitive
472.0	Front-end loader operation		
473.0	Underground conveyor		
474.0	Elevator		
475.0	Crossover belt		
476.0	Bulking loadout		
477.0	Screens		

Table 8.2 contains only a summary of the requirements that apply to the Granulation No. 2 process. Specific permit requirements are listed below Table 8.2.

Table 8.2 SUMMARY OF EMISSIONS LIMITS AND REQUIREMENTS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
8.1	PM	22.02 lb/hr, 96.47 T/yr (all stacks combined)	Tier II Permit No. 077-00006	8.11, 8.12, 8.13, 8.18
		Process weight rate	IDAPA 58.01.01.702	
8.2	PM_{10}	18.06 lb/hr, 79.12 T/yr (all stacks combined)	Tier II Permit No. 077-00006	8.11, 8.12, 8.13, 8.18
8.3	Fluorides	6.8 lb/hr, 29.78 T/yr	Tier II Permit No. 077-00006	8.10, 8.14, 8.15, 8.16, 8.17, 8.19, 8.23 to 8.27
		0.06 lb total fluoride/T equivalent P_2O_5 feed (all stacks combined)	40 CFR 63.622(a)	
8.4	NO_x	1.69 lb/hr, 7.4 T/yr (all stacks combined)	Tier II Permit No. 077-00006	8.20, 8.21
8.5	CO	0.41 lb/hr, 1.8 T/yr (all stacks combined)	Tier II Permit No. 077-00006	8.20, 8.21
8.6	SO_2	0.0016 lb/hr, 0.007 T/yr (all stacks combined)	Tier II Permit No. 077-00006	8.20, 8.21
8.7	PM fugitives	8.79 lb/hr, 38.49 T/yr	Tier II Permit No. 077-00006	8.22
8.8	PM_{10} fugitives	1.06 lb/hr, 4.63 T/yr	Tier II Permit No. 077-00006	
8.9	Fluoride fugitives	0.088 lb/hr, 0.385 T/yr	Tier II Permit No. 077-00006	

Permit Limits / Standard Summary

8.1 The permittee shall comply with the following PM emission limits:

8.1.1 The PM emissions from the combined Granulation No. 2 process stacks shall not exceed 22.02 lb/hr and 96.47 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

8.1.2 No person shall emit PM to the atmosphere from any process or process equipment operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in lb/hr, and PW is the process weight in lb/hr:

a. If PW is less than 17,000 lb/hr,

$$E = 0.045(PW)^{0.60}$$

b. If PW is equal to or greater than 17,000 lb/hr,

$$E = 1.12(PW)^{0.27}$$

[IDAPA 58.01.01.702, 4/5/00]

8.2 The PM_{10} emissions from the combined Granulation No. 2 process stacks shall not exceed 18.06 lb/hr and 79.12 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

8.3 The permittee shall comply with the following emission limits for total fluoride:

8.3.1 Total fluoride emissions from the combined Granulation No. 2 process stacks shall not exceed 6.8 lb/hr and 29.78 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

8.3.2 On and after the date on which the compliance test required to be conducted by 40 CFR 63.7 and Permit Condition 8.19 must be completed, no owner or operator subject to the provisions of 40 CFR 63, Subpart BB shall cause to be discharged to the atmosphere from any affected source any gases which contain total fluorides in excess of 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/T).

[40 CFR 63.622(a)]

8.4 The NO_x emissions from the combined Granulation No. 2 process stacks shall not exceed 1.69 lb/hr, and shall not exceed 7.4 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

8.5 The CO emissions from the combined Granulation No. 2 process stacks shall not exceed 0.41 lb/hr, and 1.8 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

8.6 The SO_2 emissions from the combined Granulation No. 2 process stacks shall not exceed 0.0016 lb/hr and 0.007 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

8.7 Fugitive PM emissions from the Granulation No. 2 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651 and shall not exceed 8.79 lb/hr and 38.49 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

8.8 Fugitive PM_{10} emissions from the Granulation No. 2 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651, and shall not exceed 1.06 lb/hr and 4.63 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

8.9 Fugitive fluoride emissions from the Granulation No. 2 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651, and shall not exceed 0.088 lb/hr and 0.385 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

Operating Requirements

8.10 On or after the date on which the performance test required to be conducted by 40 CFR 63.7 and Permit Condition 8.19 is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of Permit Condition 8.17(1) or (2).

[40 CFR 63.624]

8.11 Maintenance to the scrubbers and/or process maintenance shall be performed if visible emissions from the scrubber stacks exceed 15% opacity. A record of maintenance shall be maintained on site for the most recent five years and shall be made available to DEQ representatives upon request.

[Tier II Permit No. 077-00006, 12/3/99]

8.12 Maintenance to the baghouse shall be performed if visible emissions from the baghouse stack exceed 10% opacity. A record of maintenance shall be maintained on site for the most recent five years and shall be made available to DEQ representatives upon request.

[Tier II Permit No. 077-00006, 12/3/99]

Monitoring, Compliance Tests, And Compliance Provisions

8.13 The permittee shall monitor the pressure drop across the baghouse to ensure control of PM and PM_{10}. The pressure drop shall be recorded weekly.

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.06, 5/1/94]

8.14 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR 63, Subpart BB shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5% over its operating range.

[40 CFR 63.625(a)]

8.15 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR 63, Subpart BB shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flow rate which meets the requirements of paragraph (a) of this section and then by proceeding according to Permit Condition 8.19.3(3).

[40 CFR 63.625(b)]

8.16 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

[40 CFR 63.625(c)]

8.17 Following the date on which the performance test required in Permit Condition 8.19 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR 63, Subpart BB must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20% of the baseline average value determined as a requirement of Permit Condition 8.19.3(4). The Administrator retains the right to reduce the ±20% adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but in no instance shall the adjustment be reduced to less than #10%. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to Permit Condition 8.25(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with 40 CFR 63, Subpart BB. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in Permit Condition 8.19.3(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in 40 CFR 63, Subpart BB and established in the manner required in Permit Condition 8.19.3(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or

operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.625(f)]

8.18 PM and PM_{10} Compliance Test

8.18.1 The permittee shall conduct compliance tests within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM and PM_{10} hourly emissions limits in Permit Conditions 8.1 and 8.2. After the first compliance test, the permittee shall conduct a compliance test once per annum to demonstrate compliance with hourly PM and PM_{10} emissions limits in Permit Conditions 8.1 and 8.2.

During calendar years 2003, 2004, and 2005, compliance with the PM_{10} emissions limit in Permit Condition 8.2 shall be determined by conducting a Method 5 performance test on the tailgas scrubber stack and the baghouse stack. The PM_{10} fraction of the PM emission rate determined during the test shall be determined by multiplying the PM emission rate by a 0.82 conversion factor.

During calendar years 2004 and 2005, Method 201A and 202 performance tests shall be conducted on the baghouse stack in addition to the Method 5 test. During calendar years 2004 and 2005 Method 5 and 202 performance tests shall be conducted on the tailgas scrubber stack in addition to the Method 5 test. All performance testing shall be conducted in accordance with Permit Condition 2.16.

No later than September 30, 2005, Simplot shall submit a permit application to revise the PM_{10} emissions limits to reflect the results of the Method 201A and 202, and Method 5 and 202 performance tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM_{10} emissions limits, compliance with Permit Condition 8.2 shall be determined by source testing using Methods 201A and 202 on the baghouse stack and Methods 5 and 202 on the tailgas scrubber stack..

8.18.2 The permittee shall record the equivalent P_2O_5 feed rate to the process, the pressure drop across the baghouse, the pressure drop across each scrubber, and the flow rate of the scrubber liquid to each scrubber during compliance tests.

8.18.3 The permittee shall conduct a visible emissions evaluation during each compliance test. The visible emissions evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.322.06, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

8.19 Total Fluoride Compliance Test

8.19.1 On or before the applicable compliance date in Permit Condition 8.27 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of 40 CFR 63, Subpart BB shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63, Subpart A and in this section.

[40 CFR 63.626(a)(1)]

8.19.2 In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in this section, except as provided in 40 CFR 63.7(f).

[40 CFR 63.626(b)]

8.19.3 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line shall determine compliance with the applicable total fluorides standards in Permit Condition 8.3.2, as follows.

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) \Big/ (PK)$$

Where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sd} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR Part 60, Appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13 B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in Sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$P = M_p R_p$

Where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in Permit Conditions 8.14 and 8.15 shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference - see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus - P_2O_5 or $Ca_3(PO_4)_2$, Method A - Volumetric Method.

(C) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method B - Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method C - Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method A - Volumetric Method.

(F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method B - Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C - Spectrophotometric Method.

(4) To comply with Permit Condition 8.17(1) or (2), the owner or operator shall use the monitoring systems in Permit Condition 8.16 to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of Permit Condition 8.17(1) or (2).

[40 CFR 63.626(c)]

8.20 For the purposes of determining compliance with the short-term (lb/hr) and yearly (tons-per-year) emission limits for the pollutants, NO_x, CO, and SO_2 in Permit Conditions 8.4, 8.5, and 8.6, the permittee shall continuously monitor the amount of natural gas fired in the dryer. On a monthly basis, the permittee shall record the monthly natural gas consumption of the dryer, the monthly operating hours of the dryer, and the rolling 12-month natural gas usage.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

8.21 The permittee shall calculate the monthly and rolling 12-month emission rate of NO_x, CO, and SO_2 using AP-42 Section 1.4 (3/98) emission factors for natural gas combustion, or a DEQ-approved alternative, on a monthly basis.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.01, 3/19/99]

8.22 The permittee shall demonstrate compliance with the PM, PM_{10}, and fluoride fugitive emissions limits in Permit Conditions 8.7, 8.8, and 8.9 using the emission factors specified in Appendix D of J.R. Simplot's June 29, 2000 Tier I/II application, or a DEQ-approved alternative method.

[IDAPA 58.01.01.650-651, 5/1/94; IDAPA 58.01.01.322.06, 07, 5/1/94]

Record-keeping and Reporting Requirements

8.23 Each owner or operator subject to the requirements of 40 CFR 63, Subpart BB shall comply with the notification requirements in 40 CFR 63.9.

[40 CFR 63.627(a)]

8.24 Each owner or operator subject to the requirements of 40 CFR 63, Subpart BB shall comply with the record-keeping requirements in 40 CFR 63.10.

[40 CFR 63.627(b)]

8.25 The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

(1) Performance test report. As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

(2) Excess emissions report. As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in 40 CFR 63.10.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.627(c)]

8.26 The owner or operator shall comply with the requirements of the general provisions in 40 CFR Part 63, Subpart A as shown in Appendix A to 40 CFR Part 63, Subpart BB. Requirements are included in Appendix A of this permit.

[40 CFR 63.628]

8.27 Each owner or operator of an existing affected source at a phosphate fertilizer production plant shall achieve compliance with the requirements of 40 CFR 63, Subpart BB no later than June 10, 2002. Notwithstanding the requirements of 40 CFR 63.7(a)(2)(iii), each owner or operator of an existing affected source at a phosphate fertilizer production plant shall fulfill the applicable requirements of Permit Condition 8.19 no later than June 10, 2002.

[40 CFR 63.630(a)]

Exemption From New Source Performance Standards

8.28 Any affected source subject to the provisions of 40 CFR 63, Subpart BB is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V, Subpart W, or Subpart X. To be exempt, a source must have a current operating permit pursuant to Title V of the CAA and the source must be in compliance with all requirements of 40 CFR 63. For each affected source, this exemption is effective upon the date the owner or operator demonstrates to the Administrator that the requirements of Permit Conditions 8.10, 8.14, 8.15, 8.16, 8.17, and 8.19 have been met.

[40 CFR 63.631]

9. EMISSIONS UNIT GROUP 7: GRANULATION NO. 3 PROCESS, EAST BULKING STATION, AND DEFLUORINATION PROCESS

Summary Description

The following is a narrative description of the Granulation No. 3 process regulated in this Tier I operating permit. This description is for informational purposes only.

The Granulation No. 3 process is currently capable of making low fluoride, mono-or di-calcium-phosphate product used to make livestock supplement and specialty fertilizers. Low fluoride phosphoric acid is produced in the defluorination process by heating the phosphoric acid in the defluorination reactor tank, then adding diatomaceous earth as a silica source. The fluoride in the phosphoric acid volatilizes as silica tetrafluoride. Limestone from the limestone bins and the low fluoride phosphoric acid are mixed together to produce a slurry. The product slurry is added to product fines to produce larger product granules. The granules are dried and screened. Oversized product is crushed and recycled. Product granules are conveyed to the product storage area for shipping.

The Granulation No.3 process is not capable of making diammonium and/or monoammonium phosphate by introducing ammonia into the process.

Table 9.1 describes the emissions points related to each emissions unit of the Granulation No. 3 process and the devices used to control emissions.

Table 9.1 EMISSIONS UNITS, CONTROL DEVICES, AND POINTS

Emission Point Identification	Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
700.0	Mixer	Entoleter scrubber	Granulation No. 3 stack
703.0	Blunger		
720.0	Dryer		
	Defluorination reactors	Defluorination scrubber	
708.2	Screens	(material handling) Baghouse	
708.3	Rotex screen (Conveyors)		
709.1	Fines loadout (Recycle Drag)		
710.1	Production elevator (screen feed elevator)		
712.1	Reject elevator		
	Reject Hopper		
705.0	Limestone bins	Limestone baghouse	Limestone baghouse stacks
	Diatomaceous earth silo	Diatomaceous earth baghouse[1]	
750.0	Conveying	Reasonable control of fugitive emissions	Fugitive
751.0	Conveyor drop		
752.0	Front-end loader operations		
753.0	Bulking elevator		
754.0	Crossover belt		
755.0	East dry-bulking		
770.0	Conveying		
771.0	Conveyor drop		
772.0	Front-end loader operations		
773.0	Bulking elevator		
774.0	Crossover belt		

[1] A side stream of air from the baghouse will be used to strip fluoride from the hot treated acid. The fluoride enriched air stream from the reactors will then be scrubbed in the Defluorination Scrubber.

Table 9.2 contains only a summary of the requirements that apply to the Granulation No. 3 Process. Specific permit requirements are listed below Table 9.2.

Table 9.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Affected Emission Unit/Point	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
9.1	Granulation No. 3 stack	PM	7.0 lb/hr, 30.7 T/yr	PTC No. 077-00006	9.12, 9.13, 9.15, 9.17, 9.20, 9.21
	Diatomaceous earth silo		Process weight rate	IDAPA 58.01.01.701	9.14, 9.17
	Limestone bins				9.14, 9.17
	East dry-bulking station				9.22.5
	Granulation No. 3 stack				9.12, 9.13, 9.15, 9.17
9.2	Granulation No. 3 stack	PM_{10}	5.7 lb/hr, 25.0 T/yr	PTC No. 077-00006	9.12, 9.13, 9.15, 9.17, 9.20, 9.21
	Diatomaceous earth baghouse stack		0.28 lb/hr, 1.2 T/yr	PTC No. 077-00006	9.11.1, 9.12
9.3	Granulation No. 3 stack	Total fluorides	1.28 lb/hr, 5.63 T/yr	PTC No. 077-00006	9.13.1, 9.15, 9.17, 9.19, 9.22, 9.24
9.4	Granulation No. 3 stack	NO_x	3.4 lb/hr, 14.9 T/yr	PTC No. 077-00006	9.14, 9.18, 9.22.4
9.5		SO_2	0.02 lb/hr, 0.09 T/yr		
9.6		CO	2.9 lb/hr, 12.7 T/yr		
9.7		VOC	0.2 lb/hr, 0.9 T/yr		
9.8	All of Granulation No. 3, excluding east dry-bulking station	PM fugitives	0.7 lb/hr, 3.0 T/yr	PTC No. 077-00006	9.19
9.9	All of Granulation No. 3, excluding east dry-bulking station	PM_{10} fugitives	0.1 lb/hr, 0.5 T/yr	PTC No. 077-00006	9.19
9.10	All of Granulation No. 3, excluding east dry-bulking station	Fluoride fugitives	0.01 lb/hr, 0.02 T/yr	PTC No. 077-00006	9.19
9.11.1	Granulation No. 3 process	P_2O_5 equivalent feed rate	120% of average feed rate obtained from compliance test	PTC No. 077-00006	9.21.1
9.11.2	Defluorination process	P_2O_5 equivalent feed rate	6,250 T/mo, 75,000 T/yr	PTC No. 077-00006	9.21.2
9.11.3	East dry-bulking station	Livestock feed and TSP to the station	9,600 T/d, 3,504,000 T/yr	PTC No. 077-00006	9.21.5

Permit Limits / Standard Summary

9.1 Particulate Matter Emissions

9.1.1 The PM emissions from the Granulation No. 3 stack shall not exceed 7.0 lb/hr and 30.7 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[PTC No. 077-00006, 12/12/01]

9.1.2 No person shall emit PM to the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in lb/hr, and PW is the process weight in lb/hr:

a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.60}$$

b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

9.2 PM_{10} Emissions

9.2.1 The PM_{10} emissions from the Granulation No. 3 stack shall not exceed 5.7 lb/hr and 25.0 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[PTC No. 077-00006, 12/12/01]

9.2.2 The PM_{10} emissions from the diatomaceous earth baghouse shall not exceed 0.28 lb/hr and 1.2 T/yr.

[PTC No. 077-00006, 11/12/99]

9.3 Total fluoride emissions from the Granulation No. 3 stack shall not exceed 1.28 lb/hr, and shall not exceed 5.63 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[PTC No. 077-00006, 12/12/01]

9.4 The NO_x emissions from the Granulation No. 3 stack shall not exceed 3.4 lb/hr and 14.9 T/yr.

[PTC No. 077-00006, 12/12/01]

9.5 The SO_2 emissions from the Granulation No. 3 stack shall not exceed 0.02 lb/hr and 0.09 T/yr.

[PTC No. 077-00006, 12/12/01]

9.6 The CO emissions from the Granulation No. 3 stack shall not exceed 2.9 lb/hr and 12.7 T/yr.

[PTC No. 077-00006, 12/12/01]

9.7 The VOC emissions from the Granulation No. 3 stack shall not exceed 0.2 lb/hr, and 0.9 T/yr.

[PTC No. 077-00006, 12/12/01]

9.8 Fugitive PM emissions from the Granulation No. 3 plant and associated handling, excluding the east dry-bulking station, shall not exceed 0.7 lb/hr and 3.0 T/yr.

[PTC No. 077-00006, 12/12/01]

9.9 Fugitive PM_{10} emissions from the Granulation No. 3 plant and associated handling, excluding the east dry-bulking station, shall not exceed 0.1 lb/hr and 0.5 T/yr.

[PTC No. 077-00006, 12/12/01]

9.10 Fugitive fluoride emissions from the Granulation No. 3 plant and associated handling, excluding the east dry-bulking station, shall not exceed 0.01 lb/hr and 0.02 T/yr.

[PTC No. 077-00006, 12/12/01]

Operating Requirements

9.11 Operating Limit/Throughput Limit

9.11.1 The maximum allowable operating rate, measured in tons of P_2O_5 equivalent feed per hour, shall be limited to 120% of the average operating rate attained during any compliance test period for which a test protocol has been granted prior approval by DEQ; unless (1) the test demonstrates noncompliance, (2) a more restrictive operating limit is specified elsewhere in this permit, or (3) at such an operating rate, emissions would exceed any emission limit(s) set forth in this permit.

[PTC No. 077-00006, 12/12/01]

9.11.2 The maximum monthly throughput of P_2O_5 to the defluorination process shall not exceed 6,250 T/mo. The maximum annual throughput of P_2O_5 to the process shall not exceed 75,000 T/yr.

[PTC No. 077-00006, 11/12/99]

9.11.3 The maximum throughput of the livestock feed and TSP through the east dry-bulking station shall not exceed 9,600 T/d and 3,504,000 T/yr.

[PTC No. 077-00006, 9/13/95]

9.12 The pressure drop across the baghouse shall be maintained within O&M manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain on site at all times and shall be made available to DEQ representatives upon request.

[PTC No. 077-00006, 12/12/01]

9.13 The pressure drop and liquid flow rate of the wet scrubber shall be maintained within O&M manual specifications. Documentation of the operating pressure drop and liquid flow rate specifications for the scrubber shall remain on site at all times and shall be made available to DEQ representatives upon request.

[PTC No. 077-00006, 12/12/01]

9.14 The dryer, with a maximum rated heat input capacity of 35 MMBtu/hr (determined on a 24-hour rolling average), shall burn only natural gas as fuel.

[PTC No. 077-00006, 12/12/01]

9.15 Maintenance to the scrubbers, and/or process equipment, and/or baghouse shall be performed if visible emissions from the Granulation No. 3 plant stack exceed 15% opacity.

[PTC No. 077-00006, 12/12/01]

9.16 The permittee shall comply with the Air Pollution Emergency Rules in IDAPA 58.01.01.550 through 562.

[PTC No. 077-00006, 12/12/01]

Monitoring and Record-keeping Requirements

9.17 The permittee shall conduct compliance tests within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM hourly emissions limit in Permit Condition 9.1.1, the PM_{10} hourly emissions limit in Permit Condition 9.2.1, and the fluoride hourly emissions limit in Permit Condition 9.3.

During calendar years 2003, 2004, and 2005, compliance with the PM_{10} emissions limit in Permit Condition 9.2.1 shall be determined by conducting a Method 5 performance test on the granulation No. 3 stack. The PM_{10} fraction of the PM emission rate determined during the test shall be determined by multiplying the PM emission rate by a 0.82 conversion factor.

During calendar years 2004 and 2005, Method 5 and 202 performance tests shall be conducted on the granulation No. 3 stack in addition to the Method 5 test. No later than September 30, 2005, Simplot shall submit a permit application to revise the PM_{10} emissions limits to reflect the results of the Method 5 and 202 performance tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM_{10} emissions limits, compliance with Permit Condition 9.2.1 shall be determined by source testing using Methods 5 and 202 on the granulation No. 3 scrubber stack. The compliance tests shall be performed in accordance with Permit Conditions 2.15, 2.16, 2.17, and the following requirements, except that Permit Condition 9.17.6 shall not apply to testing of emissions of PM and PM_{10} until calendar year 2006:

9.17.1 Visible emissions shall be observed during each compliance test run using the methods specified in IDAPA 58.01.01.625.

9.17.2 The pressure drop across the baghouse shall be monitored and recorded during each compliance test.

9.17.3 The pressure drop and liquid flow rate of the wet scrubber shall be monitored and recorded during each compliance test.

9.17.4 The feed rate, in tons of P_2O_5 equivalent per hour, to the Granulation No. 3 plant shall be recorded during each compliance test. The permittee shall determine the rate of equivalent P_2O_5 feed by first determining the mass rate in tons per hour of phosphorus-bearing feed, then multiplying the phosphorus bearing feed rate by the decimal fraction of P_2O_5 content.

9.17.5 The process data specified in the approved test protocol shall be monitored and recorded during the test period.

9.17.6 If the measurement during the initial compliance test is less than or equal to 75% of the respective hourly emission standard, no further testing for that emissions standard shall be required during the term of the permit. If the measurement during the initial compliance test is greater than 75%, but less than or equal to 90% of the hourly respective emission standard, a second test for that emissions standard shall be required in the third year of the permit term. If measurement during the compliance test is greater than 90% of the respective hourly emission standard, the permittee shall conduct a compliance test for that emissions standard annually.

[PTC No. 077-00006, 12/12/01; Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.06, 5/1/94]

9.18 To demonstrate compliance with the NO_x, CO, SO_2, and VOC emissions limits, the permittee shall continuously monitor the amount of natural gas fired in the dryer. On a monthly basis, the permittee shall record the natural gas consumption of the dryer, the operating hours of the dryer, and the rolling 12-month natural gas usage. The permittee shall calculate the monthly and rolling 12-month emission rate using AP-42 Section 1.4 (3/98) emission factors for natural gas combustion, or a DEQ-approved alternative, on a monthly basis.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.01, 3/19/99]

9.19 Compliance with the fugitive PM, PM_{10}, and fluoride emission shall be determined by the following:

9.19.1 Multiplying the hourly production rate, in tons per hour, by the emission factors of 0.027 lb/T for PM, 0.004 lb/T for PM_{10}, and 0.00022 lb/T for fluoride per the facility's Granulation No. 3 upgrade permit application analysis.

9.19.2 Multiplying the annual production rate, in tons per year, by the emission factors of 0.027 lb/T for PM, 0.004 lb/T for PM_{10}, and 0.00022 lb/T for fluoride per the facility's Granulation No. 3 upgrade permit application analysis.

[PTC No. 077-00006, 12/12/01]

9.20 Within 60 days after startup, the permittee shall develop an O&M manual for the baghouse and wet scrubber system that describes the procedures that will be followed to comply with General Provision 2 of PTC No. 077-00006 and Permit Conditions 9.12 and 9.13. This manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

[PTC No. 077-00006, 12/12/01]

9.21 The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[General Provision 2 of PTC No. 077-00006, 12/12/01]

9.22 The permittee shall monitor and record the following information:

9.22.1 The feed rate of P_2O_5 equivalent to the Granulation No. 3 plant, in tons per hour, and tons per rolling 12-month period on a monthly basis.

[PTC No. 077-00006, 12/12/01]

9.22.2 The throughput of P_2O_5 to the defluorination process for that month and for the previous rolling 12-month period on a monthly basis.

[PTC No. 077-00006, 11/12/99]

9.22.3 The pressure drop across the baghouse, pressure drop across the scrubber, and liquid flow rate through the scrubber on a daily basis.

[PTC No. 077-00006, 12/12/01]

9.22.4 The rolling 24-hour average heat input of natural gas to the dryer in MMBtu per hour.

[PTC No. 077-00006, 12/12/01]

9.22.5 The throughput of TSP and livestock feed through the east dry-bulking station on both a daily and annual basis to determine compliance with Permit Condition 9.11.2. The permittee shall record the operating hours on a daily basis. The permittee shall calculate the daily, average hourly emission rate to demonstrate compliance with Permit Condition 9.1.2. All records shall be maintained on site for five years and shall be made available to DEQ representatives upon request.

[PTC No. 077-00006, 9/13/95; IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Reporting Requirements

9.23 Reserved.

9.24 40 CFR 63, Subpart BB, is not applicable to the Granulation No. 3 plant. The permittee shall notify DEQ prior to introducing ammonia into the Granulation No. 3 plant to generate diammonium and/or monoammonium phosphate.

[IDAPA 58.01.01.325.01.b, 5/1/94]

10. EMISSIONS UNIT GROUP 8: GYPSUM STACK (PILE)

Summary Description

The following is a narrative description of the gypsum stack regulated in this Tier I operating permit. This description is for informational purposes only.

Slurried gypsum from the phosphoric acid plant is combined with process water and flows to the gypsum thickener. Dewatered gypsum slurry is pumped to the gypsum stack (pile). The gypsum stack consists of three primary ponds/cells separated by dikes and levies. Gypsum slurry is collected in one cell while the other cells are allowed to dry, leaving gypsum. Backhoes move the gypsum up around the edges of the dry cell(s) and bulldozers spread and compact the material to increase the capacity of the stack. With the new edges in place, the slurried gypsum feed line(s) are then diverted to the dry cell(s) and the slurried cell is allowed to dry. Water used to transport gypsum to the gypsum stack is decanted and recycled back to the process to be used as process water.

The sources in the gypsum stack are the gypsum stack pond, dike-building activities and wind-blown dust.

Table 10.1 specifies the emissions points related to the gypsum stack.

Table 10.1 EMISSIONS UNIT AND POINTS

Emissions Unit	Source ID	Control Device	Emissions Point
Gypsum stack	1701	None	Gypsum stack pond
	1712	None	Dike building activities
	1713	None	Wind-blown dust

Table 10.2 contains only a summary of the requirements that apply to the gypsum stack. Specific permit requirements are listed below Table 10.2.

Table 10.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
10.1	Total fluorides	17.50 lb/hr, 76.65 T/yr	Tier II Permit No. 077-00006	10.9
10.2	PM_{10}	4.30 lb/hr, 18.84 T/yr	Tier II Permit No. 077-00006	
10.3	Phosphogypsum	Phosphogypsum removal from stacks	40 CFR 60, Subpart R	10.5 to 10.8, 10.10, 10.11, 10.12

Permit Limits / Standard Summary

10.1 Fluoride emissions from the gypsum stack shall not exceed 17.5 lb/hr and 76.65 T/yr.
[Tier II Permit No. 077-00006, 12/3/99]

10.2 The PM_{10} emissions from the gypsum stack shall not exceed 4.30 lb/hr and 18.84 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

10.3 Each person who generates phosphogypsum shall place all phosphogypsum in stacks. Phosphogypsum may be removed from a phosphogypsum stack only as expressly provided by 40 CFR 61, Subpart R.

[40 CFR 61.202]

Operating Requirements

10.4 Reserved.

10.5 Phosphogypsum may be lawfully removed from a stack and distributed in commerce for use in outdoor agricultural research and development and agricultural field use if each of the following requirements is satisfied:

(a) The owner or operator of the stack from which the phosphogypsum is removed shall determine annually the average radium-226 concentration at the location in the stack from which the phosphogypsum will be removed, as provided by Permit Condition 10.8.

(b) The average radium-226 concentration at the location in the stack from which the phosphogypsum will be removed, as determined pursuant to Permit Condition 10.8, shall not exceed 10 pCi/g (4500 pCi/lb).

(c) All phosphogypsum distributed in commerce for use pursuant to this Section by the owner or operator of a phosphogypsum stack shall be accompanied by a certification document which conforms to the requirements of Permit Condition 10.11(a).

(d) Each distributor, retailer, or reseller who distributes phosphogypsum for use pursuant to this section shall prepare certification documents which conform to the requirements of Permit Condition 10.11(b).

(e) Use of phosphogypsum for indoor research and development in a laboratory must comply with Permit Condition 10.6.

[40 CFR 61.204]

10.6 (a) Phosphogypsum may be lawfully removed from a stack and distributed in commerce for use in indoor research and development activities, provided that it is accompanied at all times by certification documents which conform to the requirements of Permit Condition 10.11. In addition, before distributing phosphogypsum to any person for use in indoor research and development activities, the owner or operator of a phosphogypsum stack shall obtain from that person written confirmation that the research facility will comply with all of the limitations set forth in paragraph (b) of this section.

(b) Any person who purchases and uses phosphogypsum for indoor research and development purposes shall comply with all of the following limitations. Any use of phosphogypsum for indoor research and development purposes not consistent with the limitations set forth in this section shall be construed as unauthorized distribution of phosphogypsum.

(1) Each quantity of phosphogypsum purchased by a facility for a particular research and development activity shall be accompanied by certification documents which conform to the requirements of Permit Condition 10.11.

(2) No facility shall purchase or possess more than 3182 kg (7,000 pounds) of phosphogypsum for a particular indoor research and development activity. The total quantity of all phosphogypsum at a facility, as determined by summing the individual quantities purchased or possessed for each individual research and development activity conducted by that facility, may exceed 3182 kg (7,000 pounds), provided that no single room in which research and development activities are conducted shall contain more than 3182 kg (7,000 pounds).

(3) Containers of phosphogypsum used in indoor research and development activities shall be labeled with the following warning: Caution: Phosphogypsum Contains Elevated Levels of Naturally Occurring Radioactivity.

(4) For each indoor research and development activity in which phosphogypsum is used, the facility shall maintain records which conform to the requirements of Permit Condition 10.12(c).

(5) Indoor research and development activities must be performed in a controlled laboratory setting which the general public cannot enter except on an infrequent basis for tours of the facility. Uses of phosphogypsum for outdoor agricultural research and development and agricultural field use must comply with Permit Condition 10.5.

(c) Phosphogypsum not intended for distribution in commerce may be lawfully removed from a stack by an owner or operator to perform laboratory analyses required by 40 CFR 61, Subpart R or any other quality control or quality assurance analyses associated with wet acid phosphorus production.

[40 CFR 61.205]

10.7 (a) Phosphogypsum may not be lawfully removed from a stack and distributed or used for any purpose not expressly specified in Permit Condition 10.5 or 10.6 without prior EPA approval.

(b) A request that EPA approve distribution and/or use of phosphogypsum for any other purpose must be submitted in writing and must contain the following information:

(1) The name and address of the person(s) making the request.
(2) A description of the proposed use, including any handling and processing that the phosphogypsum will undergo.
(3) The location of each facility, including suite and/or building number, street, city, county, state, and zip code, where any use, handling, or processing of the phosphogypsum will take place.
(4) The mailing address of each facility where any use, handling, or processing of the phosphogypsum will take place, if different from paragraph (b)(3) of this section.
(5) The quantity of phosphogypsum to be used by each facility.
(6) The average concentration of radium-226 in the phosphogypsum to be used.

(7) A description of any measures which will be taken to prevent the uncontrolled release of phosphogypsum into the environment.

(8) An estimate of the maximum individual risk, risk distribution, and incidence associated with the proposed use, including the ultimate disposition of the phosphogypsum or any product in which the phosphogypsum is incorporated.

(9) A description of the intended disposition of any unused phosphogypsum.

(10) Each request shall be signed and dated by a corporate officer or public official in charge of the facility.

(c) The Assistant Administrator for Air and Radiation may decide to grant a request that EPA approve distribution and/or use of phosphogypsum if he determines that the proposed distribution and/or use is at lease as protective of public health, in both the short term and the long term, as disposal of phosphogypsum in a stack or a mine.

(d) If the Assistant Administrator for Air and Radiation decides to grant a request that EPA approve distribution and/or use of phosphogypsum for a specified purpose, each of the following requirements shall be satisfied:

(1) The owner or operator of the stack from which the phosphogypsum is removed shall determine annually the average radium-226 concentration at the location in the stack from which the phosphogypsum will be removed, as provided in Permit Condition 10.8.

(2) All phosphogypsum distributed in commerce by the owner or operator of a phosphogypsum stack, or by a distributor, retailer, or reseller, or purchased by the end-user, shall be accompanied at all times by certification documents which conform to the requirements in Permit Condition 10.11.

(3) The end-user of the phosphogypsum shall maintain records which conform to the requirements of 40 CFR 61.209(c).

(e) If the Assistant Administrator for Air and Radiation decides to grant a request that EPA approve distribution and/ or use of phosphogypsum for a specified purpose, the Assistant Administrator may decide to impose additional terms or conditions governing such distribution or use. In appropriate circumstances, the Assistant Administrator may also decide to waive or modify the record-keeping requirements established by Permit Condition 10.12(c).

[40 CFR 61.206]

10.8 Before removing phosphogypsum from a stack for distribution in commerce pursuant to Permit Conditions 10.5 or 10.7, the owner or operator of a phosphogypsum stack shall measure the average radium-226 concentration at the location in the stack from which phosphogypsum will be removed. Measurements shall be performed for each such location prior to the initial distribution in commerce of phosphogypsum removed from that location and at least once during each calendar year while distribution of phosphogypsum removed from the location continues. Measurements shall be conducted in accordance with 40 CFR 61.207(a)-(c).

[40 CFR 61.207]

Monitoring and Recordkeeping Requirements

10.9 The permittee shall demonstrate compliance with the total fluoride emissions limits in Permit Condition 10.1, and PM_{10} emissions limits in Permit Condition 10.2 using method specified in Simplot's June 29, 2000 Tier I/II application, Appendix D, Air Emissions Inventory.

[IDAPA 58.01.01.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

10.10 If the gypsum stack ever becomes classified as an inactive stack, the permittee shall record the date of inactivity and notify DEQ immediately. If the gypsum stacks become classified as inactive, the permittee is then immediately subject to the Radon-222 emissions limits and its related requirements in 40 CFR 61 Subpart R.

[IDAPA 58.01.01.322.01, 3/19/99; IDAPA 58.01.01.322.07, 5/1/94]

10.11 (a) (1) The owner or operator of a stack from which phosphogypsum will be removed and distributed in commerce pursuant to Permit Conditions 10.5, 10.6, or 10.7 shall prepare a certification document for each quantity of phosphogypsum which is distributed in commerce which includes:

(i) The name and address of the owner or operator;

(ii) The name and address of the purchaser or recipient of the phosphogypsum;

(iii) Quantity of phosphogypsum, in kilograms or pounds, sold or transferred;

(iv) The date of sale or transfer;

(v) A description of the intended end-use for the phosphogypsum;

(vi) The average radium-226 concentration, in pCi/g (pCi/lb), of the phosphogypsum, as determined pursuant to 40 CFR 61.207; and

(vii) The signature of the person who prepared the certification.

(2) The owner or operator shall retain the certification document for five years from the date of sale or transfer, and shall produce the document for inspection upon request by the Administrator, or his authorized representative. The owner or operator shall also provide a copy of the certification document to the purchaser or recipient.

(b) (1) Each distributor, retailer, or reseller who purchases or receives phosphogypsum for subsequent resale or transfer shall prepare a certification document for each quantity of phosphogypsum which is resold or transferred which includes:

(i) The name and address of the distributor, retailer, or reseller;

(ii) The name and address of the purchaser or recipient of the phosphogypsum;

(iii) The quantity (in pounds) of phosphogypsum resold or transferred;

(iv) The date of resale or transfer;

(v) A description of the intended end-use for the phosphogypsum;

(vi) A copy of each certification document which accompanied the phosphogypsum at the time it was purchased or received by the distributor, retailer, or reseller; and

(vii) The signature of the person who prepared the certification.

(2) The distributor, retailer, or reseller shall retain the certification document for five years from the date of resale or transfer, and shall produce the document for inspection upon request by the Administrator, or his authorized representative. For every resale or transfer of phosphogypsum to a person other than an agricultural end-user, the distributor, retailer, or reseller shall also provide a copy of the certification document to the purchaser or transferee.

[40 CFR 61.208]

10.12 (a) Each owner or operator of a phosphogypsum stack must maintain records for each stack documenting the procedure used to verify compliance with the flux standard in Permit Condition 10.3, including all measurements, calculations, and analytical methods on which input parameters were based. The required documentation shall be sufficient to allow an independent auditor to verify the correctness of the determination made concerning compliance of the stack with flux standard.

(b) Each owner or operator of a phosphogypsum stack must maintain records documenting the procedure used to determine average radium-226 concentration pursuant to 40 CFR 61.207, including all measurements, calculations, and analytical methods on which input parameters were based. The required documentation shall be sufficient to allow an independent auditor to verify the accuracy of the radium-226 concentration.

(c) Each facility which uses phosphogypsum pursuant to Permit Condition 10.6 or 10.7 shall prepare records which include the following information:

(1) The name and address of the person in charge of the activity involving use of phosphogypsum.

(2) A description of each use of phosphogypsum, including the handling and processing that the phosphogypsum underwent.

(3) The location of each site where each use of phosphogypsum occurred, including the suite and/or building number, street, city, county, state, and zip code.

(4) The mailing address of each facility using phosphogypsum, if different from paragraph (c)(3) of this section.

(5) The date of each use of phosphogypsum.

(6) The quantity of phosphogypsum used.

(7) The certified average concentration of radium-226 for the phosphogypsum which was used.

(8) A description of all measures taken to prevent the uncontrolled release of phosphogypsum into the environment.

(9) A description of the disposition of any unused phosphogypsum.

(d) These records shall be retained by the facility for at least five years from the date of use of the phosphogypsum and shall be produced for inspection upon request by the Administrator, or his authorized representative.

[40 CFR 61.209]

11. EMISSIONS UNIT GROUP 9: RESERVED

12. EMISSIONS UNIT GROUP 10: PHOSPHORIC ACID MANUFACTURING PLANTS - PHOSPHORIC ACID PLANT NO. 400 / WET PROCESS PHOSPHORIC ACID PROCESS LINE

Summary Description

The following is a narrative description of the phosphoric acid plant No. 400 regulated in this Tier I operating permit. This description is for informational purposes only.

Phosphoric acid is produced by the reaction of sulfuric acid with phosphate ore. The sulfuric acid is generally produced on site at one of the two sulfuric acid plants (No. 300 and No. 400) and the phosphate ore is pumped in from the Smoky Canyon mine as a slurry. The ore slurry is partially dewatered in the ore thickener and excess water can be stored in one of the three slurry water storage silos. The thickened phosphate ore slurry is pumped into the main reactor at the phosphoric acid plant and mixed with high concentration sulfuric acid (typically 93%), water, and recycled acid from the belt filters. This reaction produces phosphoric acid and phosphogypsum (calcium sulfate, $CaSO_4$). The gypsum is removed by pumping the slurry onto belt filters where the phosphoric acid is removed. The solid gypsum is washed on the filters and the resulting gypsum slurry is sent to the gypsum thickener, and then to the gypsum stack. The phosphoric acid filtrate is concentrated using clarifiers and evaporators. The phosphoric acid is sent either to product storage tanks or on to the superphosphoric acid manufacturing process.

Table 12.1 describes the emissions point and the control devices used in controlling emissions. Emissions from the phosphoric acid reactor are contained inside the phosphoric acid plant No. 400 building, vented to a Davy-McKee Scrubber, and then vented through one stack.

Table 12.1: EMISSIONS UNITS, CONTROL DEVICES, AND POINT

Source ID	Emissions unit(s)/Process(es)	Emissions Control Device	Emissions Point
212.0	Phosphoric acid reactor	Digester scrubber	Belt filter scrubber stack
202.0	Digester hotwell		
226.0	Digester flash cooler pre-condensers		
203.1	Digester flash cooler vacuum pumps		
200.0	No. 2 Hot pit	Belt filter scrubber	
204.0	Belt filter filtrate cans		
209.0	Belt filters		
215.0	Evaporator hotwells		
203.2	Belt filter vacuum pumps		

Table 12.2 contains only a summary of the requirements that apply to the phosphoric acid plant No. 400. Specific permit requirements are listed below Table 12.2.

Table 12.2[1]: SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring and Record-keeping Requirements
12.1	Total fluoride	1.3 lb/hr, 4.71 T/yr	Tier II Permit No. 077-00006	12.6 through 12.12, 12.15 through 12.20
		0.020 lb/T of equivalent P_2O_5 feed	40 CFR 63.602(a); Tier II Permit No. 077-00006	
12.2	PM	3.38 lb/hr, 14.80 T/yr	Tier II Permit No. 077-00006	12.6, 12.7, 12.13
		Process weight rate	IDAPA 58.01.01.702	
12.3	PM_{10}	2.77 lb/hr, 12.13 T/yr	Tier II Permit No. 077-00006	12.6, 12.7, 12.13
12.4	Total reduced sulfur	8.61 lb/hr, 37.7 T/yr	Tier II Permit No. 077-00006	12.4, 12.14
12.5	Fugitive PM_{10}	0.01 lb/hr, 0.03 T/yr	Tier II Permit No. 077-00006	12.5

[1]If any requirement in this permit conflicts with any requirement contained in 40 CFR 63, the requirement in 40 CFR 63 shall supercede.

Permit Limits / Standard Summary

12.1 Total Fluorides

12.1.1 For the wet process phosphoric acid process line, the permittee shall comply with the total fluorides standard of 0.020 lb/T of equivalent P_2O_5 feed.

[40 CFR 63.602(a)]

12.1.2 Total particulate and gaseous fluoride emissions from the phosphoric acid plant No. 400 stack shall not exceed 1.30 lb/hr, and 4.71 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

12.2 The PM emissions from the phosphoric acid plant No. 400 stack shall not exceed the emission limits set by IDAPA 58.01.01.701, or 3.38 lb/hr (whichever is more restrictive), and shall not exceed 14.80 T/yr. The ton-per-year rate shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.701, 4/5/00]

12.3 The PM_{10} emissions from the phosphoric acid plant No. 400 stack shall not exceed 2.77 lb/hr and 12.13 T/yr. The ton-per-year rate shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

12.4 Total reduced sulfur emissions from the phosphoric acid plant No. 400 stack shall not exceed 8.61 lb/hr, and 37.7 T/yr. The ton-per-year emissions rate shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

12.5 Uncaptured fugitive PM_{10} emissions shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651. In addition, they shall not exceed 0.01 lb/hr and 0.03 T/yr, as determined in Simplot's June 29, 2000 Tier I/II application Appendix D, Air Emissions Inventory.

[Tier II Permit No. 077-00006, 12/3/99]

Operating Requirements

12.6 On or after the date on which the performance test required to be conducted by 40 CFR 63.7 and Permit Condition 12.12 is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of Permit Condition 12.11(1) or (2).

[40 CFR 63.604; Tier II Permit No. 077-00006, 12/3/99]

12.7 Maintenance to a scrubber and/or process maintenance shall be performed if visible emissions from the scrubber stack exceed 15% opacity. This maintenance opacity applies to all scrubbers described in this process. The permittee shall maintain a record of emission control equipment maintenance, which will be made available to inspectors on request.

[Tier II Permit No. 077-00006, 12/3/99]

Monitoring Requirements

12.8 Each owner or operator of a new or existing wet-process phosphoric acid process line subject to the provisions of 40 CFR 63, Subpart AA shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5% over its operating range.

[40 CFR 63.605(a)(1)]

12.9 Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of 40 CFR 63, Subpart AA shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flow rate which meets the requirements of Permit Condition 12.8 and then by proceeding according to Permit Condition 12.12.2(3).

[40 CFR 63.605(b)(1)]

12.10 Each owner or operator of a new or existing wet-process phosphoric acid process line using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5% over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5% over its operating range.

[40 CFR 63.605(c)]

12.11 Following the date on which the performance test required in Permit Condition 12.12 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides contained in 40 CFR 63, Subpart AA must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20% of the baseline average value determined as a requirement of Permit Condition 12.12.2(4). The Administrator retains the right to reduce the ±20% adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ±10%. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to Permit Condition 12.17(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with Subpart AA. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in Permit Condition 12.12.2(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in Subpart AA and established in the manner required in Permit Condition 12.12.2(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.605(d)]

Compliance Tests and Compliance Provisions

12.12 On or before June 10, 2002, and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the total fluorides emissions limits in Permit Condition 12.1 for each existing wet-process phosphoric acid process line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR Part 63, Subpart A and in this permit condition.

[40 CFR 63.606(a)(1); Tier II Permit No. 077-00006, 12/3/99]

12.12.1 In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this Permit Condition, except as provided in 40 CFR 63.7(f).

[40 CFR 63.606(b); Tier II Permit No. 077-00006, 12/3/99]

12.12.2 Each owner or operator of a new wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standard in Permit Condition 12.1.1, as specified in (1) and (2).

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) \Big/ (PK)$$

Where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR Part 60, Appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in Sections 7.3.3 and 7.3.4. in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$P = M_p R_p$

Where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in 40 CFR Part 63.605(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference - see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis For Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method A-Volumetric Method.

(C) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method B-Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method C-Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method A-Volumetric Method.

(F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method B-Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method C-Spectrophotometric Method.

(4) To comply with Permit Condition 12.11(1) or (2), the owner or operator shall use the monitoring systems in Permit Condition 2.10 to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of Permit Condition 12.11(1) or (2).

[40 CFR 63.606(c)]

12.13 PM and PM_{10} Performance Test

12.13.1 The permittee shall conduct compliance tests within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM and PM_{10} hourly emissions limits required in Permit Conditions 12.2 and 12.3. After the first compliance test, the permittee shall conduct a compliance test once per annum to demonstrate compliance with hourly PM and PM_{10} emissions limits in Permit Conditions 12.2 and 12.3.

During calendar years 2003, 2004, and 2005, compliance with the PM_{10} emissions limit in Permit Condition 12.3 shall be determined by conducting a Method 5 performance test on the belt filter scrubber stack. The PM_{10} fraction of the PM emission rate determined during the test shall be determined by multiplying the PM emission rate by a 0.82 conversion factor.

During calendar years 2004 and 2005, Method 5 and 202 performance tests shall be conducted on the belt filter scrubber stack in addition to the Method 5 test. All performance testing shall be conducted in accordance with Permit Condition 2.16.

No later than September 30, 2005, Simplot shall submit a permit application to revise the PM_{10} emissions limits to reflect the results of the Method 5 and 202 performance tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM_{10} emissions limits, compliance with Permit Condition 12.3 shall be determined by source testing using Methods 5 and 202 on the belt filter scrubber stack.

12.13.2 The permittee shall record the equivalent P_2O_5 feed rate to the process, the pressure drop across each scrubber, and the flow rate of the scrubber liquid to each scrubber during compliance tests.

12.13.3 The permittee shall conduct a visible emissions evaluation during each compliance test. The evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.322.06, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

12.14 The permittee shall conduct a one-time compliance test during permit term to demonstrate compliance with the total reduced sulfur limits in Permit Condition 12.4.

[IDAPA 58.01.01.322.06, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

Notification, Record-keeping, and Reporting Requirements

12.15 Each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the notification requirements in 40 CFR 63.9.

[40 CFR 63.607(a)]

12.16 Each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the record-keeping requirements in 40 CFR 63.10.

[40 CFR 63.607(b)]

12.17 The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

(1) Performance test report. As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

(2) Excess emissions report. As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in 40 CFR 63.10.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.607(c)]

Compliance Date

12.18 The permittee shall comply with 40 CFR 63, Subpart AA no later than June 10, 2002.

[40 CFR 63.609(a)]

Exemption from New Source Performance Standards

12.19 Any affected source subject to the provisions of 40 CFR 63, Subpart AA is exempted from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart T, Subpart U, or Subpart NN, To be exempt, a source must have a current operating permit pursuant to Title V of the CAA and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective the date that the owner or operator demonstrates to the Administrator that the requirements of Permit Conditions 12.6, 12.8, 12.9, 12.10, 12.11, and 12.12 have been met.

[40 CFR 63.610]

Applicability of 40 CFR 63, General Provisions

12.20 The owner or operator shall comply with the requirements of the general provisions in 40 CFR 63, Subpart A, as contained in Appendix A to 40 CFR 63, Subpart AA.

[40 CFR 63.608]

13. EMISSIONS UNIT GROUP 11: PLANT ROADS

Summary Description

The following is a narrative description of the plant roads regulated in this Tier I permit. This description is for informational purposes only.

Light-and heavy-duty vehicles use plant roads to transport personnel and materials within the facility.

Table 13.1 relates the emissions point to the emissions units.

Table 13.1 EMISSIONS UNITS AND EMISSIONS POINT

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Paved roads	Reasonable methods as needed	Fugitive
Unpaved roads	Reasonable methods as needed	

Table 13.2 contains only a summary of the requirements that apply to plant roads. Specific permit requirements are listed below Table 13.2.

Table 13.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
13.1	PM	3.12 lb/hr, 13.65 T/yr	Tier II Permit No. 077-00006	13.2
13.2	PM_{10}	1.94 lb/hr, 8.48 T/yr	Tier II Permit No. 077-00006	13.2

Permit Limits / Standard Summary, and Record-keeping

13.1 The PM emissions from plant roads shall not exceed 3.12 lb/hr and 13.65 T/yr. The emissions limits shall be determined by DEQ's emissions estimation methods in J.R. Simplot's plant expansion permit application analysis.

[Tier II Permit No. 077-00006, 12/3/99]

13.2 The PM_{10} emissions from plant roads shall not exceed 1.94 lb/hr and 8.48 T/yr. The emissions rates shall be determined from the *PM_{10} Air Quality Improvement Plan for Power and Bannock Counties* dated May 1993.

[Tier II Permit No. 077-00006, 12/3/99]